#### COMMONWEALTH OF KENTUCKY

#### BEFORE THE PUBLIC SERVICE COMMISSION

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In the Matter of:

THE APPLICATION OF LOGAN

TELEPHONE COOPERATIVE

CORPORATION, INC., FOR
ORDER AUTHORIZING AD
JUSTMENT OF RATES AND

CHARGES

)

### ORDER

On March 29, 1983, Logan Telephone Cooperative Corporation, Inc., ("Logan") filed an application with this Commission giving notice of an adjustment to its rates effective May 1, 1983. The proposed rates would produce additional revenue of \$259,606 annually, an increase of 23.8 percent based on normalized test period revenues. Logan stated that the proposed adjustment in rates was required to maintain a reasonable working capital and a proper ratio between income and interest obligations, to provide a reasonable surplus for equity growth and replacement of equipment, and to maintain proper service to its customers.

By Commission Order entered April 22, 1983, the effective date of the proposed adjustment to Logan's tariffs was suspended until October 1, 1983, pursuant to the provisions of KRS 278.190. A hearing was held as scheduled at the Commission's offices in Frankfort, Kentucky, on June 16, 1983, with the Consumer Protection Division of the

Attorney General's Office ("AG") being the sole intervenor.

This Order addressess the Commission's findings and determinations on issues presented and disclosed in the investigation of Logan's proposed revenue requirement and rate design and provides rates and charges that will produce an increase in annual revenues of \$259,606.

#### COMMENTARY

Logan is a customer-owned telephone cooperative providing telephone service to approximately 4,500 subscribers in the Kentucky counties of Logan, Simpson, Butler, Todd, Muhlenberg and Ohio.

## ANALYSIS AND DETERMINATION

## Test Period

Logan proposed and the Commission has adopted the 12-month period ending December 31, 1982, as the test period in this matter.

### **VALUATION**

#### Net Investment

Logan proposed a net investment rate base at December 31, 1982, of \$9,387,753. In determining this level of net investment, Logan included its investments in the Rural Telephone Bank of \$183,740. The Commission is of the opinion that these investments should not be included in calculating the net investment rate base. Therefore, the Commission has deleted this amount from Logan's proposed rate base. Furthermore, the Commission has reduced the rate base by \$80,269 as a corresponding adjustment to the depreciation

expense adjustment found reasonable in a later section of this Order.

After consideration of these adjustments, Logan's net investment rate base at December 31, 1982, is as follows:

Telephone Plant in Service	\$10,131,720
Telephone Plant Under Construction	570,284
Subtotal	\$10,702,004
Less Accumulated Depreciation	2,034,479
Net Plant	\$ 8,667,525
Materials and Supplies	174,279
Prepaid Expenses	8,871
Direct Financing Lease	273,069
Net Investment Rate Base	\$9,123,744

### Capital Structure

The Commission finds from the evidence of record that Logan's capital structure at the end of the test period was \$9,925,964 and consisted of \$722,597 in equity and \$9,203,367 in long-term debt.

The Commission has given due consideration to Logan's capital structure, net investment rate base and other elements of value in determining the reasonableness of the rate increase requested herein.

## REVENUES AND EXPENSES

For the 12 months ending December 31, 1982, Logan had a net loss of \$16,264. In order to reflect current operating conditions, Logan proposed several adjustments to revenues and expenses which resulted in an adjusted test period net loss of \$73,049. The Commission in determining the proposed level of revenues and expenses finds the appropriate level of adjusted test period net income from telephone operations to

In its analysis of Logan's operations, the be \$7,016. Commission has accepted most of the proposed adjustments annualization of revenues, depreciation, including the the phasing-in of amortization and interest, connection expenses, and reallocation of management wages. following adjustments were However, the found unreasonable for the purpose of determining rates: Depreciation and Amortization Expense

Logan proposed to adjust depreciation and amortization expenses to reflect end-of-period levels of plant in service and extraordinary retirements by \$120,755 to \$537,293, including \$46,757 for amortization of extraordinary retirements previously approved by the Commission.

Logan's proposed depreciation rates for station connections-outside, station connections-embedded and station connections-new were 8, 20, and 20 percent, respectively. On September 28, 1981, the Commission entered an Order in Case No. 8344, The Application of Logan Telephone Cooperative, Inc., To Consider Changes with Respect to the Expensing of Station Connections Resulting from the Amendment of the Uniform System of Accounts, which approved the phasing-in of the expensing of station connections and, on page 2 of Appendix A, found the rates to be 5, 10 and 10 percent, respectively. Therefore, depreciation expense has been reduced by \$18,107 to reflect this level of depreciation for rate-making purposes.

## Non-recurring Expenses

During the test period Logan resolved a boundary dispute with South Central Bell Telephone Company regarding the jurisdiction of a large user of telephone service. Many of the expenses associated with this dispute were unique to this dispute alone and, therefore, non-recurring. Also, during the test period, Logan purchased IBM software for its computer, trained a new employee to replace a retiring employee, and to roof two central office buildings. The Commission is of the opinion that each of these expenses should not be expensed during one accounting period, but rather amortized over several years. Following is a list of items expensed over 3 years for rate-making purposes:

\$ 3,340
1,950
8,512
\$13,802
8,564
5,500
10,500
\$38,366

Thus, operating expenses have been reduced \$25,577.

#### Fixed Charges

Logan proposed to increase its fixed charges by \$88,716, to reflect the difference between the actual test period level of fixed charge net of interest during construction of 36,381 and the pro forma level. This calculation indirectly reduces interest during construction to zero. The Commission is of the opinion that the appropriate adjustment to fixed charges should be net of the

test period level of interest during construction. Thus, net income has been increased \$36,381.

Based on the aforesaid adjustment, Logan's net income is as follows:

	Proposed	<u>Adjustment</u>	Reasonable
Operating Revenues	\$1,764,963	\$36,381	\$1,801,344
Operating Expenses	1,341,738	<43,634>	1,298,054
Net Operating Income	423,225	80,065	503,290
Other Income	8,726		8,726
Fixed Charges	505,000		505,000
Net Income (Loss)	\$ <73,049>	\$80,065	\$ 7,016

## REVENUE REQUIREMENTS

The Commission has consistently determined revenue requirements for telephone cooperatives based on a return on net investment rate base and a Times Interest Earned Ratio ("TIER"). The Commission determines the TIER based upon the calculation provided in the Rural Electrification Administration mortgage agreement, section 5, which bases the coverage on net income before interest charges.

The actual rate of return on Logan's net investment rate established herein for the test period was 4.7 percent. After taking into consideration the accepted pro forma adjustments, Logan would realize an adjusted rate of return of 5.5 percent. The Commission is of the opinion that the adjusted rate of return is inadequate and a more reasonable rate of return would be 8.4 percent. In order to achieve this rate of return, Logan should be allowed to increase its annual revenue by the full amount requested, or \$259,606.

This revenue increase will result in a TIER of 1.53 and will provide net income of \$266,622 which should be sufficient to meet the requirements of Logan's mortgages securing its long-term debt.

### RATE DESIGN

Logan did not propose any change in rate design. However, consistent with the revenue requirement found reasonable in this Order, the Commission has adjusted various rates.

Local exchange service has been priced on a residual basis. This is the Commission's normal practice and achieves the objective of maintaining local exchange rates at the lowest reasonable level.

The Commission has reduced service charges from the level proposed by Logan to a level consistent with phase 2 expensing of station connections revenue requirement. Logan may file for phase 3 and 4 expensing of station connections revenue requirement as outlined in Case No. 8344.

The Commission has priced directory listings to reflect prevailing rates among telephone companies under its jurisdiction, as determined from these companies' tariffs on file with this Commission.

The Commission has accepted Logan's proposed rates for key equipment, private branch exchange equipment, miscellaneous and auxiliary equipment and service, and private line service, except key installations charges and off premises extension charges. The Commission has increased

key installation charges toward the cost levels documented in Logan's application. Also, the Commission has increased off premises extension charges to reflect prevailing rates among telephone companies under its jurisdiction as determined from these companies' tariffs on file with the Commission.

### SUMMARY

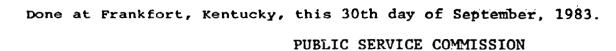
The Commission, after consideration of the evidence of record and being advised, finds that:

- 1. The rates and charges in Appendix A are the fair, just and reasonable rates and charges for Logan to charge its customers for telephone service and will produce gross annual operating revenue of \$2,024,569.
- 2. The rates and charges proposed by Logan, insofar as they differ from those in Appendix A, should be denied upon application of KRS 278.030.

IT IS THEREFORE ORDERED that the proposed rates and charges in Logan's notice of March 29, 1983, be and they hereby are denied.

IT IS FURTHER ORDERED that Logan be and it hereby is authorized to place into effect the rates and charges in Appendix A for all service rendered on and after October 1, 1983.

IT IS FURTHER ORDERED that, within 30 days of the date of this Order, Logan shall file its tariff sheets setting out the rates approved herein.



Chairman Muull
Vice Chairman

Commissioner

ATTEST:

Secretary

## APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 8781 DATED SEPTEMBER 30, 1983.

The following rates and charges are prescribed for the customers in the area served by Logan Telephone Cooperative, Inc. All other rates and charges not specifically mentioned herein shall remain the same as those in effect under authority of this Commission prior to the effective date of this Order.

#### GENERAL SUBSCRIBER SERVICES TARIFF

#### LOCAL EXCHANGE SERVICE

C.1.2 Monthly exchange service rates as authorized by the Kentucky Public Service Commission.

ONE-PARTY SERVICE
RATE COMPONENTS
Network Access Charge

RESIDENCE BUSINESS \$23.45

#### SERVICE CONNECTION CHARGES

- 4 -		NRC
D.4.2	Basic Service Connection Charges - New Installation	\$28.00
D.4.3	Basic Service Connection Charge - Instrumentalities in-place	28.00
D.4.4	Reconnect Charge	22.60
D.4.5	Each Additional Single Line Instrument - New Installation	26.00
D.4.6	Each Extension Bell, Gong, Horn, Chime	26.00
D.4.7	Inside Move	24.00

# SERVICE CONNECTION CHARGES (Cont'd)

		NRC	
D.4.8	Outside Move	\$28.00	
D.4.9	Name and/or Number Change	12.50	
D.4.11	Restoral Charge	15.10	
D.4.12	Maintenance of Service Charge		minimum 1/2 hour 1/4 hour thereafter
D.4.13	Returned Check Charge	12.50	
D.4.14	Instrument Change	18.50	
D.4.15	Late Payment Charge	2.00	

# DIRECTORY LISTINGS

		Monthly Rate
F.5.2	Additional Listings, per line of information	\$ 1.25
F.5.3	Duplicate and Cross Reference	1.25
F.5.4.	Alternate Call Number Listings, each	1.25
F.5.5	Foreign Exchange Listings, each	1.25
the ra	te for a foreign Company Listing will be te applicable in the directory where the g appears.	
F.5.6	Temporary Listings, each	1.25
F.5.7	Office Hour Listings, each	1.25
1.	Dual Name Listings Primary Service Listing, each Additional Listing, each	1.25 1.25 1.25
F.5.9	Unlisted Number, each	1.00

## DIRECTORY LISTINGS (Cont'd)

	Monthly Rate
F.5.10 Non-Published Number, each	\$ 2.00
F.5.11 Indented Listings, each	1.25
F.5.12 Caption Listings, each	1.25

### KEY AND PUSHBUTTON TELEPHONE SERVICE

	Monthly Rate	Installation Charge
J.3.1 Key Systems		
J.3.1.1 Each Trunk at 1-1/2 times the one-party business rate	Sec."C"	\$34.00
J.3.1.2 Tel-Touch calling service each trunk at 1-1/2 times the one-party business rate	Sec."M"	Sec."M"
J.3.1.3 Common Equipment:		
1. Up to six trunks	\$28.00	No Charge
J.3.1.4 Each Telephone:		
10/20/30 Series - J.3.1.4.11 Ten- Button Desk Instrument with Rotary Dial	7.50	60.25
J.3.1.4.12 Ten-Button Desk Instrument with Push Button Dial.	8.25	60.25
J.3.1.4.13 Ten-Button Wall Instrument with Rotary Dial	8.00	60.25
J.3.1.4.14 Ten-Button Wall Instrument with Push Button Dial.	8.75	60.25



# KEY AND PUSHBUTTON TELEPHONE SERVICE (Cont'd)

	Monthly Rate	Installation Charge
Logic Series - J.3.1.4.15 Ten- Button Desk Instrument with Rotary Dial	\$ 8.00	\$60.25
J.3.1.4.16 Ten-Button Desk Instrument with Push Button Dial.	8.75	60.25
J.3.1.5 Intercommunicating Line System for:		
J.3.1.5.1 Rotary Dial System	7.00	10.00
J.3.1.5.2 Pushbutton Dial System	14.00	10.00
J.3.2 Type 512 or 684 or Equivaler	ıt	
J.3.2.1 Each trunk at 1-1/2 times the one-party business rate	Sec."C"	\$34.00
J.3.2.2 Tel-Touch calling service trunk at 1-1/2 times the one-party business rate	Sec."M"	Sec."M"
J.3.2.3 Common Equipment		
J.3.2.3.1 Up to 13 trunks	36.50	No Charge
J.3.2.3.2 14-19 trunks	49.50	No Charge
J.3.2.3.3 20-25 trunks	62.00	No Charge
10/20/30 Sories - J.3.2.4.11 Ten- Button Desk Instrument with Rotary Dial	7.50	60.25
J.3.2.4.12 Ten-Button Desk Instrument with Push Button Dial	8.25	60.25
J.3.2.4.13 Ten-Button Wall Instrument with Rotary Dial	8.00	60.25



		Monthly Rate	Installation Charge
	J.3.2.4.14 Ten-Button Wall Instrument with Push Button Dial.	\$ 8.75	\$60.25
	J.3.2.4.15 Twenty-Button Desk Instrument with Rotary Dial	11.50	60.25
	J.3.2.4.16 Twenty-Button Desk Instrument with Push Button Dial	12.25	60.25
	J.3.2.4.17 Thirty-Button Desk Instrument with Rotary Dial	15.50	60.25
1800 T	ype - J.3.2.4.18 Thirty-Butto Desk Instrument with Push Button Dial	on 16.25	60.25
Logic	Series - J.3.2.4.19 Ten-Buttonesk Instrument with Rotary Dial	on 8.00	60.25
	J.3.2.4.20 Ten-Button Desk Instrument with Push Button Dial	8.75	60.25
	J.3.2.4.21 Twenty-Button Desk Instrument with Rotary Dial	12.25	60.25
	J.3.2.4.22 Twenty-Button Desk Instrument with Push Button Dial	13.00	60.25
J.3.3	Customer Engineered Type 56-A or Equivalent		

These systems provide for a maximum of 20 lines with winking line hold, holding key and pick-up keys, visual line and busy signals by illuminated pick-up keys.



# KEY AND PUSHBUTTON TELEPHONE SERVICE (Cont'd)

	Monthly Rate	Installation Charge
OPTION: Four link inter- communicating lines with full selective audible signaling between stations by use of the dial in the telephone.		
J.3.3.1 Each trunk at 1-1/2 times the one-party business rate	Sec."C"	\$34.00
J.3.3.2 Tel-Touch calling service		
J.3.3.2.1 Each Trunk at 1-1 times the one-party busines rate		Sec."M"
J.3.3.3. Common Equipment		
J.3.3.3.1 Up to 12 Trunks	\$74.00	No Charge
J.3.3.3.2 13-16 Trunks	79.00	No Charge
J.3.3.3.3 17-20 Trunks	84.00	No Charge
10/20/30 Series - J.3.3.4.11 Ten Button Desk Instrument with Rotary Dial	7.50	\$60.25
J.3.3.4.12 Ten-Button Desk Instrument with Push Button Dial	8.00	60.25
J.3.3.4.13 Ten-Button Wall Instrument with Rotary Dial	8.00	60.25
J.3.3.4.14 Ten-Button Wall Instrument with Push Buttor Dial	8.50	60.25
J.3.3.4.15 Twenty-Button Desk Instrument with Rotary Dial	11.50	60.25
J.3.3.4.16 Twenty-Button Desk Instrument with Push Button Dial	12.00	60.25

# KEY AND PUSHBUTTON TELEPHONE SERVICE (Cont'd)

		Monthly Rate	Installation Charge
	J.3.3.4.17 Thirty-Button Desk Instrument with Rotary Dial	\$15.50	\$60.25
	J.3.3.4.18 Thirty-Button Desk Instrument with Push Button Dial	16.00	60.25
J.3.3.	4 Each Telephone		
Logic	Series - J.3.3.4.19 Ten- Button Desk Instrument with Rotary Dial	8.00	60.25
	J.3.3.4.20 Ten-Button Desk Instrument with Push Button Dial	8.50	60.25
	J.3.3.4.21 Twenty-Button Desk Instrument with Rotary Dial	12.25	60.25
т 2 2	J.3.3.4.22 Twenty-Button Desk Instrument with Push Button Dial 5 Intercommunicating Line	12.75	60.25
0.3.3.	System for		
	J.3.3.5.1 Two-Link Rotary Dial System	37.00	10.00
	J.3.3.5.2 Two-Link Push Button Dial System	40.00	10.00
	J.3.3.5.3 Four-Link Rotary Dial System	50.00	10.00
	J.3.3.5.4 Four-Link Push Button Dial System	53.75	10.00
	J.3.3.5.5 Single- Link Rotary Dial System	15.00	10.00



	Monthly Rate	Installation Charge			
J.3.3.5.6 Single- Link Rotary Push Button System	\$20.00	\$10.00			
J.4 Optional System Feature					
J.4.1 Music On Hold	1.50	10.00			
J.4.2 Paging Access	5.00	10.00			
J.4.3 Conference Add On	7.50	10.00			
J.5 Optional Key Telephone Equipment					
J.5.1 Speaker Phones					
J.5.1.3 10/20 Series (1) Ten-Button Rotary or Push Button Dial	12.00	60.25			
J.5.1.4 Twenty-Button Rotary or (1) Push Button Dial	14.00	60.25			
(1) Monthly rate on these phones takes the place of rates for key telephones in Section j.3.					
J.6 Move and Charges					
J.6.1 The following move charge applies to all key telephone sets in lieu of the equipment work charges in Section "D"					
J.6.1.2 Each Multi- Button Set		60.25			
J.6.1.3 Materials invoiced cost plus 40%					

## PBX AND PABX SERVICE

			Monthly Rate
3.	PBX	Trunk Rates	
		Lines provided as PBX Trunks will be charged at	\$44.00
	1.	Selectors, Connectors or Selector- Connector each	3.00
		Tie Line Terminal	3.50
	2.	Dial Station Line Terminals in use each	0.50
	3.	Trunks	44.00
	4.	Stations, including extensions, dial or manual, each	2.50
	1.	Intercommunicating and Trunk Switching Equipment	
		2 trunks, and 10 stations 2 trunks, and 22 stations 5 trunks, and 20 stations	20.00 40.00 60.00
	2.	Attendants Turret for use with 5 trunk, 20 station system	15.00

### MISCELLANEOUS EQUIPMENT

## M.3.2 Rates

Off Premises Extension

Mileage 1.00 1/4 mile

## M.5.2 Rates

The rate for a rotary line is 1.00 per rotary feature

# AUXILIARY EQUIPMENT

		Monthly Rate
Mc.2 Special Feature Telephones		
Mc.2.1.3 The following charges are rotary dial instrument. In with pushbutton dial will a charges applying in this set the tariff		
Rates		
Slenderet		\$ 3.25
Trendline		3.25
Mc.2.3.4	Monthly Rate	Installation Charge
A. ITT Type	\$6.00	\$7.50
		Monthly Rate
Mc.2.5.3.1 Outdoor telephone sets		\$ 6.00
Mc.2.6 Impaired Hearing Equipment		
Mc.2.6.1 Attachment to telephone for hard of hearing equipped with a volume control to raise the incoming voice level, will be provided for each, per month		3.00
Mc.2.7 Telephone for Use in Explosive Atmosphere		
Telephone of type with underwriters approval, each		25.00
Mc.3 Long Cords		
Mc.3.3.1 Receiver Cord straight or retractable		1.00
Mc.3.3.2 Line Cord, straight or retractable		1.00

# AUXILIARY EQUIPMENT (Cont'd)

		Monthly Rate			
Mc.4 Signaling Equipment					
Mc.4.1.2 Monthly Rates					
E. Horns with relay each		\$ 5.00			
Mc.4.2.2 Monthly Rates					
<pre>C. Button D. Buzzer E. Power Supply for actuating signals</pre>		0.50 0.65 7.00			
Mc.4.2.3 Visual Signals					
A. Lamps each		0.50			
Mc.5 Jacks and Plugs					
Mc.5.6 Rates and charges for jack and plug equipment are as follows					
Add each pre-wire jack		10.00			
Mc.6 Paging Equipment					
Mc.6.2 Charges	Monthly Rate	Installation Charge			
100 Watt Amplifier 200 Watt Amplifier	\$15.00 20.00	\$ 8.00 8.00			
Mc.7 Headset-Starset					
Mc.7.2 Rate					
Monthly rate	2.50				
Mc.9 Automatic Telephone Answering Sets					
Mc.9.3					
A. Automatic Answer Set	19.00	34.00			

## PRIVATE LINE SERVICE

## T.3 Monthly Charges

T.3.1 Each pair will be charged at the rate of \$3.00 for the first quarter mile, and \$.75 for each quarter mile or fraction of a quarter mile thereafter. The measurement of distance will be made in route mileage.